



ADDENDUM NUMBER 1

R17-28 Chemoy-Dogwood Watermain Install & Replacement

December 11, 2017

This Addendum shall be read in conjunction with and considered as an integral part of the Request for Proposals. Respondents should acknowledge the addendum on Appendix A the Submission Form. The Addendum is as follows:

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The following documents are attached:

- The MOTI Permit to Construct
- Corix Materials List

End of Addendum 1

Anthony Jeffery
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PERMIT TO CONSTRUCT, USE, AND MAINTAIN WORKS WITHIN THE RIGHT-OF-WAY OF A PROVINCIAL PUBLIC HIGHWAY

PURSUANT TO TRANSPORTATION ACT AND/OR THE INDUSTRIAL ROADS ACT AND/OR THE
MOTOR VEHICLE ACT AND/OR AS DEFINED IN THE NISGA'A FINAL AGREEMENT AND THE
NISGA'A FINAL AGREEMENT ACT.

BETWEEN:

The Minister of Transportation and Infrastructure

Vancouver Island District
Third Flr
2100 Labieux Road
Nanaimo, BC V9T 6E9
Canada

("The Minister")

AND:

Cowichan Engineering Services Ltd.
6468 Norcross Road
Duncan, British Columbia V9L 6C5
Canada

("The Permittee")

WHEREAS:

- A. The Minister has the authority to grant permits for the auxiliary use of highway right of way, which authority is pursuant to both the Transportation Act and the Industrial Roads Act, the Motor Vehicle Act, as defined in the Nisga'a Final Agreement and the Nisga'a Final Agreement Act;
- B. The Permittee has requested the Minister to issue a permit pursuant to this authority for the following purpose:

The installation, operation, and maintenance of 180m of 150mm water main to be installed along Chemoy Road, and works along Dogwood Road in the boulevard, as this is a chip sealed surface with significant landscaping, as per previous permit the 3 bore attempt can be foregone.
- C. The Minister is prepared to issue a permit on certain terms and conditions;

ACCORDINGLY, the Minister hereby grants to the Permittee a permit for the Use (as hereinafter defined) of highway right of way on the following terms and conditions:

- 1. That the construction and maintenance of the said works is carried out to the satisfaction of the Regional Director, Transportation.
- 2. That, before opening up any highway or interfering with any public work, intimation in writing of the intention to do so must be given to the District Official at least seven days before the work is begun.
- 3. That any person appointed by the Regional Director, Transportation, for the purpose shall have free access to all parts of the works for the purpose of inspecting the same.
- 4. That the construction of the said works shall be commenced on or before the 1st December 2017 and shall be prosecuted with due diligence and to the satisfaction of the Regional Director, Transportation, and shall be completed on or before the 1st April 2018.
- 5. (a) The highway must at all times be kept open to traffic. The roadway must be completely restored for traffic as soon as possible. At all times the permittee must safeguard the traveling public.
(b) That, unless with the consent of the Regional Director, Transportation, no more than forty-five (45) metres of pipe-track or



other excavation in any public highway is to be kept open at one time.

(c) All excavation work must be carried out in accordance with the BC Occupational Health and Safety Regulation. Care shall be taken to protect adjacent property.

(d) That all excavations shall be carefully back-filled with suitable material, which is to be tamped into place, and that the permittee shall restore the surface of the road and shoulders and ditches at his own expense. All surplus material is to be removed from the Provincial Crown lands, or deposited where and as required by the District Official of the Ministry of Transportation and Infrastructure. The permittee is financially responsible for any maintenance works required on said ditch for a period of one year. The Ministry will carry out the necessary remedial work and invoice the permittee monthly.

(e) The pipeline crossing installation is to be placed by drilling and (or) jacking in such a manner as to afford minimum grade settlement. No water jetting will be permitted. That where, in the opinion of the District Official, an excavation or opening for a pipeline crossing installation could be made which would not be detrimental to the highway or its users, permission will be granted for said works. On thoroughways, freeways, and main highways no open cuts will be allowed.

(f) That all pipelines in excess of a nominal diameter of 5 cm., whether gas, oil, water, pressure sewers, conduits, etc., shall be installed where indicated by the District Official, encased in a steel casing-pipe or conduit-pipe of sufficient strength to withstand all stresses and strains resulting from the location, such casing to extend the full width of the highway right-of-way if deemed necessary to the District Official. The ends of the casing-pipe shall be suitably sealed and, if required, properly vented above the ground with vent-pipes not less than 5 cm. in diameter, and extending not less than 1.2 metres above ground surface. Vent-pipes shall be connected 30 cm. from the ends of the casing-pipe, and the top of each vent shall be fitted with a turn-down elbow, properly screened and equipped with identification markers.

All pipelines of non-rigid material, i.e., plastic or copper, of any diameter, shall be cased, or embedded in sand.

The inside diameter of the casing-pipe shall be at least 25 percent larger than the outside diameter of the pipeline. The casing-pipe shall be installed with an even bearing throughout its length, and in such a manner so as to prevent leakage, except through the vents.

The top of the casing-pipe, or the pipeline where casing is not required, shall be located as directed by the District Official, and shall in no case be less than 1.2 metres below the surface of the highway and not less than 75 cm below the highway ditches. Pipelines must not obstruct drainage structures or ditches or interfere with traffic on the highway or with highway maintenance.

6. That where the work for which permission is hereby granted comes in contact with any bridge, culvert, ditch, or other existing work, such existing work must be properly maintained and supported in such manner as not to interfere with its proper function during the construction of the new work, and on the completion of the new work the bridge, culvert, ditch, or other existing work interfered with shall be completely restored to its original good condition.
7. That when necessary all excavations, materials, or other obstructions are to be efficiently fenced, lit, and watched, and at all times every possible precaution is to be taken to ensure the safety of the public.
8. The Permittee shall indemnify and save harmless the Ministry, its agents and employees, from and against all claims, liabilities, demands, losses, damages, costs and expenses, fines, penalties, assessments and levies made against or incurred, suffered or sustained by the Ministry, its agents and employees, or any of them at any time or times, whether before or after the expiration or termination of this permit, where the same or any of them are based upon or arise out of or from anything done or omitted to be done by the Permittee, its employees, agents or Subcontractors, in connection with the permit.
9. That the permission herein granted to use and maintain the works is only granted for such times as the land or public work in, upon, or over which the said works are constructed is under the jurisdiction of the Minister of Transportation and Infrastructure. This permission is not to be construed as being granted for all time, and shall not be deemed to vest in the permittee any right, title or interest whatsoever in or to the lands upon which the works are constructed. Should the lands affected at any time be included within that of an incorporated municipality or city, this permission shall become void, unless the works are on a highway duly classified as an arterial highway pursuant to Section 45 of the Transportation Act.
10. That after receiving notice in writing of the intention on the part of the Provincial Government to construct, extend, alter, or improve any public work, the person or persons responsible for the maintenance of the works for which permission is hereby granted shall within six weeks move or alter such work at his or their own expense to such new positions or in such manner as may be necessitated by the construction, extension, alteration, or improvement proposed to be carried out by the Provincial Government.
11. That while reasonable care will be taken on the part of the Provincial Government to do as little damage as possible to any private work in the carrying-out of the construction, extension, alterations, improvement, repair, or maintenance of any public work adjacent thereto, the Provincial Government can accept no responsibility for any kind of such damage.
12. That the permission hereby granted to construct, use, and maintain work is granted without prejudice to the provisions of the Transportation Act, or other Acts governing Crown lands and public works or their use by the public.
13. That this permission shall be in force only during such time as the said works are operated and maintained by the applicants, to



the entire satisfaction of the Regional Director, Transportation.

14. That the Ministry will not be responsible for grade changes on accesses caused by reconstruction of any Provincial highway.
15. This permit is valid only for the specific works stated herein. Any alterations or additions must be covered by a separate permit.
16. This permit may be canceled, at the discretion of the Minister, without recourse, should the permittee fail to comply with all the terms of the permit. Thirty days' notice will be given before cancellation.
17. When the requirements of the Ministry necessitate use of the said lands for Provincial purposes, at the discretion of the Minister, this permit may be canceled.
18. That these works shall be identified with this permit number in a manner satisfactory to the District Official of the Ministry of Transportation and Infrastructure.
19. As a condition of this permit, the permittee unconditionally agrees with the Ministry of Transportation and Infrastructure that the permittee is the prime contractor or will appoint a qualified prime contractor, as described in Section 118 of the Workers Compensation Act, for the purposes of the work described by this permit, at the work location described in this permit, and that the permittee or designated prime contractor will observe and perform all of the duties and obligations which fall to be discharged by the prime contractor pursuant to the Workers Compensation Act and the Occupational Health and Safety Regulation.
20. The permittee is advised and acknowledges that the following hazards may be present at the work location and need to be considered in co-ordinating site safety: overhead hazards, particularly electrical or telecommunications lines; buried utilities, particularly electrical, telecommunication, and gas lines; traffic, danger trees, falling rocks, and sharp or infectious litter.
21. Any works within the Ministry right-of-way that fall within the scope of "engineering" under the Engineers and Geoscientists Act will be performed by a Professional Engineer, and shall comply with this Ministry's "Engineer of Record and Field Review Guidelines". The Guidelines can be viewed on the Ministry's website at <http://www2.gov.bc.ca/assets/gov/driving-and-transportation/transportation-infrastructure/engineering-standards-and-guidelines/technical-circulars/2009/t06-09.pdf>
22. The permittee is responsible for preventing the introduction and spread of noxious weeds on the highway right-of-way as defined by the British Columbia Weed Control Act and Weed Control Regulation.
23. Permittee to be responsible for any settlement, erosion or other damage caused as a result of this construction for a period of two years from completion of construction.
24. The Permittee is to ensure that no damage is done to any existing underground or overhead utilities.
25. Applicant to notify affected land owner's of potential landscaping disturbance, prior to commencement of works.
26. Protection of Survey Monuments

The Permittee shall be responsible for the preservation during construction of all geodetic benchmarks, survey monuments and property markers on the right-of-way. The Permittee shall use, at no expense to the Ministry, a British Columbia Land Surveyor to replace any survey monuments destroyed or damaged as a result of the Permittee's negligence. At locations where construction work will cover or destroy such markers, the Permittee shall not move or remove them until written direction is received from the Ministry Representative.
27. Protection of Roads

The Permittee shall ensure all equipment working on or hauling material on to and from the Site does not damage or deposit material onto any part of an existing roadway. Materials spilled onto the public roadways or driveways opened to public traffic shall be cleaned up immediately. The Permittee has the full responsibility to repair any damage to existing highways, local roads and driveways caused by its construction equipment and/or operations.
28. Accommodation of Traffic

The Permittee shall, at his cost, supply, erect, and maintain standard traffic control devices in accordance with the Ministry of Transportation and Infrastructure Traffic Control Manual for Works on Roadways and Occupational Health and Safety Regulation.
29. Trenching Standards

Pavement must be cut by hand or approved mechanical means in straight lines parallel to the trench centreline.

Distance from a pavement cut to the edge of the trench must be at least 150 mm or sufficient to ensure the pavement will not be undermined by sloughing.

Except where trenching is well clear of the road shoulder, all excavated material must be removed from the site immediately.

Stockpiling of native material adjacent to the trench is not permitted.

Trenches must be backfilled or adequately covered at the end of the work day



Trench shoring must conform to WorkSafe BC standards and is to be used where soil conditions warrant. Extreme care must be taken to avoid sloughing of the trench sides to minimize damage to the subgrade beyond the limits of excavation.

30. Trench Backfill

Pipe bedding must conform to industry standards.

Where sloughing of trench sides has undermined the pavement, the pavement must be marked with a painted line showing the extent of the damaged area. Pavement must be removed from this area and the voids filled and compacted in accordance with backfill requirements.

Trenches must be backfilled with granular material that meets Ministry standards as set out in Section 202.02 (Table 202-C), 2009 Standard Specifications for Highway Construction and all subsequent interim revisions and updates, in accordance with the following minimum requirements:

(a) Sub-base material must meet or exceed specified requirements for Select Granular Sub Base aggregates.

(b) Crushed Base Course depth is to match existing depth, but must not be less than 300 mm compacted thickness and consist of "25 mm minus" WGB (or IGB) crushed aggregate.

Backfill must be placed in layers not exceeding 150 mm compacted thickness and shall be compacted with approved tamping equipment to a minimum of 95 percent Proctor density to within 300 mm of the surface and 100 percent for the final 300 mm.

31. Temporary Patching

As soon as any portion of the highway can be re-opened to traffic, a temporary asphalt patch must be applied.

32. Permanent Patching

Pavement edges must be cut, made true and straight, cleaned, and primed before installing a final patch.

Asphalt concrete must be restored to the same thickness as the existing surface or to a minimum of 75 mm thickness, whichever is greater. Asphalt concrete must meet Ministry standards as set out in Section 502, Standard Specifications for Highway Construction.

Asphalt concrete is to be laid in two or more lifts or layers. Each lift is to be thoroughly compacted before successive lifts are applied.

The Permittee will ensure that the permanent pavement patch is to Ministry standards for one year from the date that the patch is installed.

33. Highest Standards Apply

Where the Ministry and a regulator both set a standard or requirement in a particular area, the highest or most stringent of the two will apply to any installation on highway right-of-way.

34. Clean Up

All unsuitable material and inorganic debris shall be removed from the project area. All surplus or unsuitable organic waste and debris shall be removed from the site unless its complete burning is approved by the Designated Ministry Official in compliance with the B.C. Open Burning Smoke Control regulation.

35. Excavations across entrances

Excavations across entrances, whether private or commercial, must be backfilled and thoroughly compacted by the end of the current working day. The surface must be restored, whether paved or gravel, to its original condition within 48 hours.

Affected property owners must be notified at least 48 hours in advance before excavating a driveway.

36. Removal

The Minister may order the removal or alteration of utility installations, if necessary, for the protection of the highway or highway users.

If the utility owner does not respond to an order to remove or alter a utility installation, the Minister may carry out that work and recover costs from the utility.

37. Permittee is responsible for ensuring that all works are contained to the highway right of way. Any works located within private property must have the owner's permission.

38. A copy of the permit is to be kept by the field supervisor, in order that he is aware of all permit conditions.

39. Three reasonable attempts to bore or jack the pipeline, under paved road crossings, shall be expected prior to consideration of open cut crossings. Should open cutting be subsequently permitted, compaction, material, concrete capping and patching specifications shall be provided. If open cutting is permitted the crossing shall be perpendicular to centre line in order to minimize



disturbance to the road structure, unless otherwise approved. Any open cut trench is to be saw cut to a width of one metre additional width beyond the edge of the trench excavation unless such width reaches the curb or edge of pavement. After three (3) months or when the hot patch has settled, the trench plus an additional three (3) meters on either side is to be scarified to a 50mm depth and re-paved to create a smooth seam and surface. The permittee shall be responsible for the repair of any failure and/or settlement of the excavation area for a period of three (3) years.

40. As constructed drawings shall be provided to the Ministry Representative (Anika Johal) covering all works permitted within the right-of-way.
41. No signage or barrier locations are to be altered as a result of the permitted works.
42. This permit does not authorize any lane closures. If a lane closure is required please contact Anika Johal 250-751-3277.

The rights granted to the Permittee in this permit are to be exercised only for the purpose as defined in Recital B on page 1.

Dated at Nanaimo, British Columbia, this 7 day of December, 2017

Jamie Leigh Hopkins
Development Approvals Technician
On Behalf of the Minister

Quantity	Unit of Measure Code	Description
		Chemoy Watermain
183	M	150MM (6) DR18 C900 PIPEX6.1M
12.2	M	100MM (4) DR18 C900 PIPEX6.1M
		Fittings
2	EA	6" DI C153 TYT 22 BEND
4	EA	6" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
12	EA	6" DENSO TAPE
		Culvert @1+123
12	M	12"300MM CSP STL CLVT 1.6T
1	EA	FIT/CSP/12"/COUP/3
2	/C	14X30" BURLAP SAND BAG
		East Cemoy Rd Tie in
1	EA	6" DI FLG C110 TEE
1	EA	6" HXFLG RW GATE VLV LH MUE DI
2	EA	6" FLG RW GATE VLV LH MUE DI
3	EA	ROBAR SQR VB W/LID(WTR)
2	EA	6X4" DI FLG C110 RED
2	EA	4" DI C153 TYTXFLG 45 BEND
2	EA	4" DI C153 TYT 45 BEND
2	EA	1408 4" 5.10(A1)-5.30(E5) CPLG
5	EA	6" FLG GSK SET C/W BOLTS
2	EA	4" FLG GSK SET C/W BOLTS
1	EA	6" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
6	EA	4" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
		West Cemoy Rd Tie in
1	EA	6" DI C153 TYTXFLGXFLG TEE
1	EA	6X4" DI FLG C110 RED
1	EA	4" DI C153 TYTXFLG 90 BEND
1	EA	6" DI C153 TYT CAP
2	EA	6" HXFLG RW GATE VLV LH MUE DI
2	EA	ROBAR SQR VB W/LID(WTR)
1	EA	1408 4" 5.10(A1)-5.30(E5) CPLG
3	EA	6" FLG GSK SET C/W BOLTS
1	EA	4" FLG GSK SET C/W BOLTS
3	EA	6" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
1	EA	4" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
		Hydrant Ass'y @ 1+110
1	EA	6" DI C153 TYTXFLGXFLG TEE
1	EA	6" DI C153 TYTXFLG 45 BEND
2	EA	6" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
3	EA	6" FLG GSK SET C/W BOLTS
1	EA	6" FLG RW GATE VLV LH MUE DI
1	EA	6" HXFLG RW GATE VLV LH MUE DI
2	EA	ROBAR SQR VB W/LID(WTR)
6.1	M	150MM (6) DR18 C900 PIPEX6.1M

20 FT	3/4"X10' PLATED REDI ROD
4 EA	3/4" PLT NUT GR5
4 EA	3/4" PLT WASHER
1 EA	T/C #C71P 41/2' BURY HYD
1 EA	100X300X300MM CONC HYD BLOCK
	Lot Services
	x3 @19mm; x5 @ 25mm
	Meter supplied by CVRD
100 FT	3/4"X100' MST 200
3 EA	2706 6.60-7.45X3/4" CC DS SDL
3 EA	3/4 CMB CCXCJ PLUG MAIN NL
3 EA	6031-215H3H3UQ COP STTR FP NL
9 EA	3/4" SPLIT SS INSERT
400 FT	1"X100' MST 200
5 EA	2706 6.60-7.45X1" CC DS SDL
5 EA	1" CMB CCXCJ PLUG MAIN NL
5 EA	6031-415H4H4UQP COP STTR FP NL
15 EA	1" SPLIT SS INSERT
8 EA	#B937 305MM TOP/EXT
8 EA	#37 CI METER BOX LID TRPL HOLE
	Dogwood Watermain
305 M	150MM (6) DR18 C900 PIPEX6.1M
	Hydrant Ass'y x3
	1+011; 1+146; 1+305(w/cap)
3 EA	6" DI C153 TYTXFLG TEE
6 EA	6" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
3 EA	6" FLG GSK SET C/W BOLTS
3 EA	6" HXFLG RW GATE VLV LH MUE DI
3 EA	ROBAR SQR VB W/LID(WTR)
18.3 M	150MM (6) DR18 C900 PIPEX6.1M
60 FT	3/4"X10' PLATED REDI ROD
12 EA	3/4" PLT NUT GR5
12 EA	3/4" PLT WASHER
3 EA	T/C #C71P 41/2' BURY HYD **CVRD**
3 EA	100X300X300MM CONC HYD BLOCK
1 EA	6" DI C153 TYT CAP
	Air release Ass'y - MMCD W6
1 EA	2706 6.60-7.45X1" IP DS SDL
1 EA	1" CMB BALL MAIN MIPXFIP NL
1 EA	1X12" BRS NIPPLE
1 EA	1" NPT AIR VALVE, CI BODY, BRZ, SS TRIM
2 EA	24X24" CO SECTION
1 EA	C18 FRM
1 EA	C18 CVR MARKED (WATER)
	End of Line Cap @ 1+007
1 EA	6" HUB RW GATE VLV LH MUE DI

1 EA	ROBAR SQR VB W/LID(WTR)
1 EA	6" DI C153 TYT CAP
1 EA	6" PV LOK REST.RING CIOD C/W 2RODS AND 4NUTS
20 FT	3/4"X10' PLATED REDI ROD
4 EA	3/4" PLT NUT GR5
4 EA	3/4" PLT WASHER
	Lot & Sample Service
	**14 Lots +1 sample
300 FT	3/4"X100' MST 200
15 EA	2706 6.60-7.45X3/4" CC DS SDL
15 EA	3/4 CMB CCXCJ PLUG MAIN NL
1 EA	3/4"CMB CPLG CJ FULL BORE NL
45 EA	3/4" SPLIT SS INSERT
14 EA	6031-215H3H3UQ COP STTR FP NL
14 EA	#B937 305MM TOP/EXT
14 EA	#37 CI METER BOX LID TRPL HOLE